**IN THE SPECIFICATION:**

**Paragraph bridging pages 1-2, beginning on page 1, at line 22, and ending on page 2 at line15.**

(Currently Amended) An optical demultiplexer (or a spectroscope) is used for the purpose of performing ~~demultiplexing/~~ demultiplexing detection of optical signals with a plurality of wavelengths multiplexed artificially as represented by wavelength of division multiplexing of optical communication, or for the purpose of spectrally analyzing beam to be measured as represented by spectroscopic measurement. The optical demultiplexer requires a spectroscopic device such as a prism, a wave filter, a diffraction grating, or the like. Especially, a diffraction grating is a representative spectroscopic device. A device having a periodic fine corrugated structure formed on a surface of a substrate of quartz, silicon or the like is used as the diffraction grating. Diffracted beam components generated by the periodic corrugated structure interfere with one another, so that beam with a certain specific wavelength is made to exit in a specific direction. This characteristic is used as one of a demultiplexing device.

**Paragraph on page 3, at lines 9-17**

(Currently Amended) In the case of a reflection type diffraction grating, there holds the expression:

$$\mathrm{Sin}\theta i + \sin\theta o = s\lambda/d$$

in which s is the diffraction order of the diffraction grating, d is the grating constant thereof, $\lambda$ is the wavelength used, $\theta i$ is the angle between a line normal to the surface where the diffraction grating is formed and incident beam (the optical axis **5** of the optical fiber), and $\theta o$ is the angle between the normal line and exit beam rays.

**Paragraph bridging pages 33-34 beginning on page 33 at line 22 and ending on page 34 at line 8.**

(Currently Amended) As a result, when TH linearly polarized beam **20** was made incident, linear leaked beam about 2 mm wide and about 50 mm long (in a direction perpendicular to Fig. 17) was projected on a screen 15 distanced by about 200 mm from the multilayer film 1, as shown in Fig. 17. The leaked beam was emitted outward along the path shown in Fig. 14. As shown in Fig. 18, the angle θ exhibited a change of about 27 degrees in accordance with the wavelength is change of about 33 inn when the wavelength is changed from 647 nm to 680 nm. This angle change corresponded to the guided beam 2A shown in Fig. 7. It could be said that chromatic dispersion 10 times as large as that obtained in a background-art diffraction grating was obtained.

**Paragraph bridging pages 34-35, beginning on page 34 at line 21, and ending on page 35 at line 5**

(Currently Amended) As a beam source, there was used a substantially monochromatic beam source in which white beam of ~~an~~ a xenon lamp became monochromatic by a monochromator. After beam emitted from the monochromator and passed through a multi-mode optical fiber, the beam was formed into substantially parallel luminous flux to pass through a crystal polarizer 13. The beam was formed into substantially parallel luminous flux converged practically into NA = 0.1 by an objective lens 14 so as to be incident on the perpendicular end surface of the multilayer film of the sample 15 placed in the position of the focal position.

**Paragraph on page 28, lines 23-25**:

(Currently Amended) As a method for forming the ~~muyltilayer~~ multilayer film, it is possible to use vacuum evaporation, sputtering, ion-assist evaporation, a CVD method, or the like.